



Spirit of '76

# Surface Warships

## ◆ Today

- MCM-1
- LSD-41
- FFG-7
- DD-963
- DDG-51
- MHC-51
- LHA-1
- LHD-1
- CG-47
- CVN-68

## ◆ Tomorrow

- DDG-51 Flt IIA
- LPD-17
- Cruiser Conversion
- FFG-7 Modernization
- CVN-77

## ◆ Future

- DD-21
- CG-21
- JCC(X)
- LHA(R)
- T-AKE
- CVN (X)





# ***Recent Surface Warship Successes***

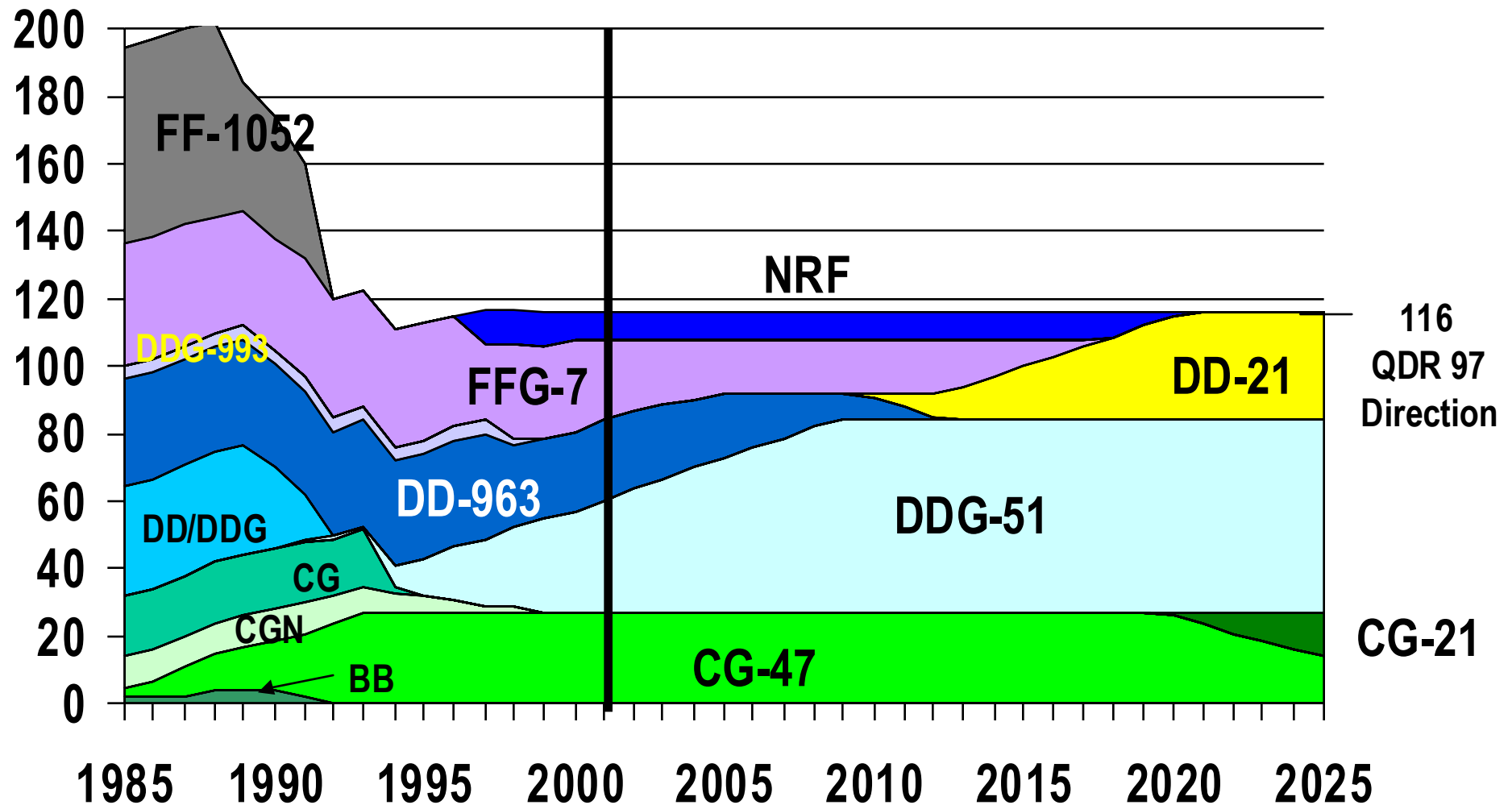
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- ◆ **First Flight IIA DDG-51 delivered:  
USS OSCAR AUSTIN (DDG-79)**
  - 30 of 57 DDG-51s commissioned
- ◆ **LPD-17 keel laid**
- ◆ **JCC(X) AoA Part I complete, Part II JUL01**
- ◆ **Smart Ship starting on AEGIS Cruisers**
- ◆ **DD-21 proposals in hand, source selection in process**
- ◆ **Six Mine Warfare Ships forward deployed to Arabian Gulf (x4) and Japan (x2)**



# Surface Combatant Force Level

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# Shipbuilding Challenge



- ◆ Quadrennial Defense Review '97 force level of approximately 300 ships
- ◆ Trends in operations and deployments severely stressing current level of 318 ships
- ◆ Analysis suggests requirement of ~360 ships
  - 3 Carrier Battle Groups/Amphibious Readiness Groups in 3 forward deployment hubs
- ◆ Current shipbuilding funds meet *neither* QDR '97 force levels *nor* current mission analysis levels

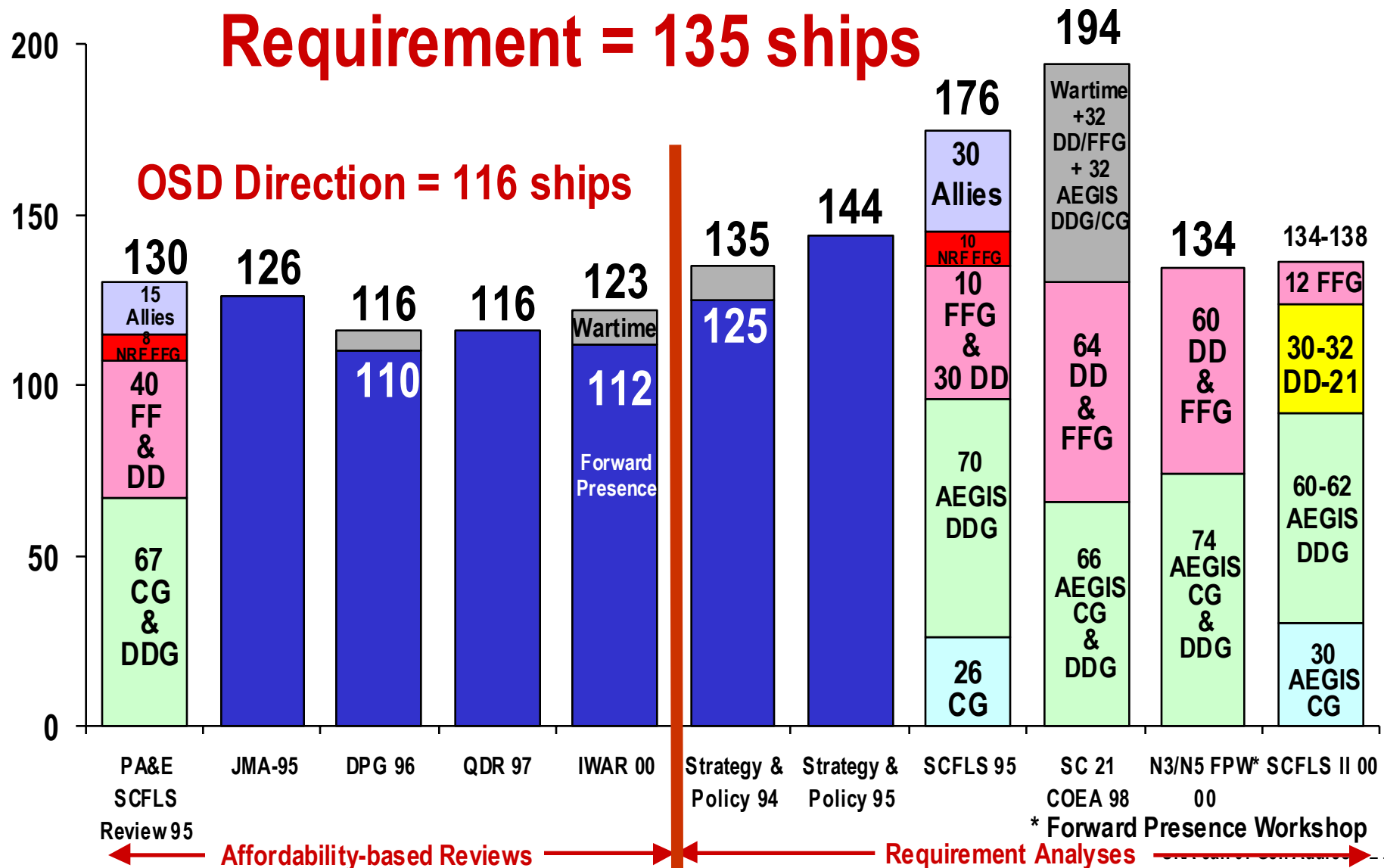
<u>Force Structure</u>	<u>Ships per year</u>	<u>Funding per year</u>
360	10.3	\$12.4B
305	8.7	\$10.5B
BES 02	6.3	\$7.7B

**Build to Force Level Requirements**

# Surface Combatant Force Level Mix Studies 1994 - 2000



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# DDG-51

## ◆ DDG-51:

- Most capable destroyer ever built
- 57 programmed
- Continuous warfighting improvements
- Flight IIA starting to enter Fleet
- Ahead of schedule and under cost



**Most Successful Program in DoD**



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# ***USS COLE (DDG-67)***

***“Men mean more than guns in the rating of a ship”  
-John Paul Jones-***

- ◆ **People were magnificent -- highest traditions of the Naval service**
- ◆ **Tough design critical to survival**
- ◆ **Re-learned lessons in many areas**
- ◆ **Anti-Terrorist / Force Protection capability must evolve to meet growing / determined terrorist threat**

**US Will Not Be Deterred From Presence Mission**



# ***LPD-17.....Centerpiece for 21<sup>st</sup> Century***



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- ◆ 12 ships replace four ship classes
  - LPD-4, LKA, LST, and LSD-36
- ◆ Enhanced ship self defense systems
- ◆ Improved acquisition process
- ◆ Minimal mil-specs
- ◆ Robust communications
- ◆ Integrated Marine shooting trainer
- ◆ Shock hardened
  - ◆ Versatile Marine training spaces
  - ◆ Fulfills Marine Corps lift requirements



**Expeditionary Maneuver Warfare**





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# FFG Modernization



## Combat Systems

- ◆ Improve Detection  
TISS / SPS-49 MPU / SYS-2 / IRST
- ◆ ASCM Defense  
RAM / NULKA / CIWS Bk IB
- ◆ C4I Upgrade  
EHF / LINK 16 / UYK-43
- ◆ Improve Maintainability

## HM&E

- ◆ Improve Plant Reliability/ Maintainability  
CAT SSDGs/ RO Units/ SFC / Ventilation
- ◆ Improve safety  
COTS Davit/ SCBA

**Work Horse of the Fleet**



# ***Combat Logistics Forces***

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- ◆ **12 T-AKE Ships planned with IOC in 2005**
  - Replaces aging T-AE, T-AFS-1/8, and AOE 1 class ships



- Diesel, gas turbine, or electric drive propulsion plant
- Size, speed (20-26 kts), and cargo mix (single or multi product) will be the result of various ongoing trade-off studies

**Beans and Bullets at Commanders Call**



# Cruiser Conversion

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- ◆ Midlife modernization of 27 AEGIS Cruisers
- ◆ 14 AREA TBMD and Strike Leaders
- ◆ 13 Navy Theater Wide TBMD and Area Air Defense Coordinator (AADC) Leaders
- ◆ Rationale
  - Sustain force levels
  - Deploy new vital capabilities sooner
    - » TBMD            » Land Attack
    - » AADC           » Force protection
  - Cost effective
  - Industrial base preservation
  - Wide support
- ◆ \$2.1B in Five Year Defense Plan (FYDP) for 10 CG's. CG-47 thru 51 not included



**Meets All SECNAV / CNO Priorities**

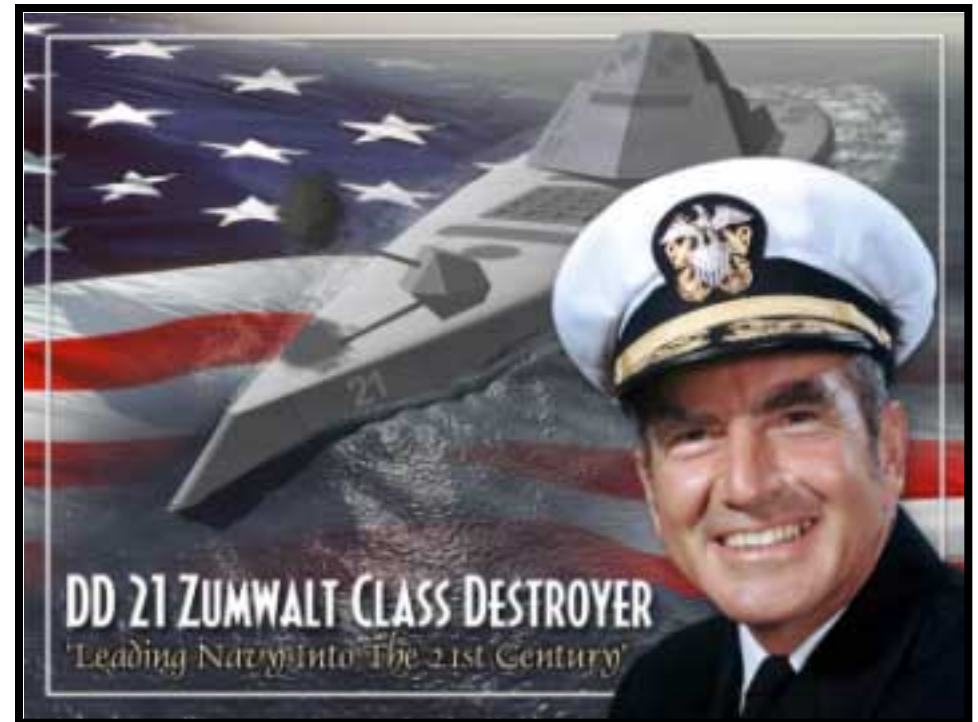
# DD-21

## *The Future of Surface Warfare*



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- ◆ **Multi-mission**
  - Assured access
  - Power projection
  - Projected defense
- ◆ **Major offensive firepower**
- ◆ **Passive and active self defense**
- ◆ **Full service contract**
- ◆ **21<sup>st</sup> Century acquisition strategy**



**Multi-warfare Capability With Land Attack Focus**





# ***DD-21 - A Revolution in the Making***

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- ◆ Integrated power system
- ◆ Open architecture distributed combat system
- ◆ Advanced hull form
  - ◆ Reduced manning
  - ◆ Extensive but smart automation
  - ◆ Advanced wideband apertures
  - ◆ Signature reduction
  - ◆ Reduced operating and support costs
  - ◆ Advanced gun / land attack missile systems
  - ◆ Multi-function radar / volume search radar
  - ◆ In-stride mine avoidance



**Design to Cost**



# Surface Mine Counter Measures

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- ◆ Robust In-Stride MCM Capability for Combatants
- ◆ One Carrier Battle Group (CVBG) Organic MCM equipment will be composed of:
  - Three AMCM CH-60 Helicopters
  - Three Remote Minehunting Systems (RMS)
  - One Long-Term Mine Reconnaissance System (LMRS)



**Organic Capability Essential for Littoral Operations**